



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  
Heideman et al.

Serial No.: 09/693,803

Filed: October 20, 2000

For: INTEGRATED OPTICAL  
LIGHTGUIDE DEVICE

Examiner: Kang, Juliana

Group Art Unit: 2874

) Attorney Docket No.  
) 080743165002  
)

) I hereby certify that this correspondence  
) is being deposited with the U.S. Postal  
) Service as First Class Mail in an  
) envelope addressed to Assistant  
) Commissioner of Patents,  
) Box \_\_\_\_\_  
) Washington, DC 20231 on 12-11-2001

) *Merri C. Merrill*  
) Merri C. Merrill  
)

*8/A*  
*G. Stanley*  
*12-7-01*

AMENDMENT AND RESPONSE

In response to the Office Action mailed September 4, 2001, please amend the  
above-identified application as follows:

In The Claims:

Cancel claims 1-12

Add new claims 13-24 as follows:

*Sub B2*  
*a1*

13. A method to determine the amount of light passing through an integrated optical light guide device from a light source located at an entrance to a light detector located at an exit thereof said light guide device comprising along the direction of light propagation several types of segments, each type of segments showing a different refractive index profile, the refractive index profile of at least one type of segments being sensitive to the value of an external physical parameter or chemical compound activating said segment by contacting, characterized in that use is made of a refractive index profile dependent attenuation of guided modes passing transitions between two different segments, and in that segments of one type show measured along the light propagation in the direction of the guided modes a predetermined arbitrary length

RECEIVED  
FEB - 5 2001  
1C 2874 MAIL ROOM